WHAT IS CLAIMED IS:

1. A direct current vibration motor comprising:

a stator formed of a permanent magnet magnetized in an axial direction so as to have magnetic poles at a plurality of locations in a circumferential direction, the magnet having a ring-like configuration or being arranged in a ring-like configuration;

a rotor rotatably provided with respect to the stator and having an armature located opposite to the magnetized surface of the permanent magnet eccentrically fixed to the rotation shaft; and

current path formation means comprising a commutator and a brush for forming a current path for supplying to the armature current whose polarity is subsequently reversed along with the rotation of the rotor;

wherein the armature is provided with a first coil and a second coil arranged in such a manner that the spatial phase becomes equal to each other, and the current path formation means supplies the current to the first coil and the second coil respectively by making the electric phase different from each other.

2. The direct current vibration motor according to claim 1, wherein the second coil is coaxially wound around the inside of the first coil.

3. The direct current vibration motor according to claim 1, wherein the first coil and the second coil

are formed of two-lines coils.

4. The direct current vibration motor according to claim 1, wherein a position regulation pin comprising a magnetic body is further provided on the armature in the circumferential direction.

5. The direct current vibration motor according to claim 1, wherein a pin is further provided so as to overlap the first coil and the second coil at the position of the end of the rotation direction and so as to follow the direction of the magnetic force.

6. The direct current vibration motor according to claim 1, wherein the stator has four magnetic poles in a circumferential direction, the first coil and the second coils are coaxially wound in a size covering one to two magnetic poles out of four magnetic poles of the stator, and at the same time, one end of the coils are commonly connected,

the commutator is attached on the rotor, and is divided into six in the rotation direction of the rotor, and, at the same time, the divided bodies located opposite to each other are commonly connected and each pair of the divided bodies are connected respectively to each one end of the first coil and the second coil and the common ends thereof, and

the brushes are attached on the stator and comprise two brushes respectively connected with a spatial phase difference of 90° to the commutator.

7. The direct current vibration motor according to claim 6, wherein the second coil is coaxially wound around the inside of the first coil.

8. The direct current vibration motor according to claim 6, wherein the first coil and the second coil are simultaneously formed of two lines coils at the same time.

9. The direct current vibration motor according to claim 6, wherein a position regulation pin comprising a magnetic body is provided on the armature in the circumferential direction.

10. The direct current vibration motor according to claim 6, wherein a pin is further provided so as to overlap the first coil and the second coil at the position of the end of the rotation direction and so as to follow the direction of the magnetic force.

11. The direct current vibration motor according to claim 1, wherein the armature is further provided with a third coil arranged adjacent to the first coil and the second coil in the rotation direction.

12. The direct current vibration motor according to claim 11, wherein the second coil is coaxially wound around an inside of the first coil.

13. The direct current vibration motor according to claim 11, wherein the first coil and the second coil are simultaneously formed of two-lines coils.

14. The direct current vibration motor according

to claim 11, wherein a weight is further provided which is arranged adjacent to the first coil and the second coil in the rotation direction.

15. The direct current vibration motor according to claim 14, wherein the first coil through the third coil and the weight are integrally fixed with the resin frame.

16. The direct current vibration motor according to claim 11, wherein the stator has four magnetic poles in the circumferential direction;

the first coil and the second coil are coaxially wound in a size covering one through two magnetic poles out of four magnetic poles of the stator, and the third coil is arranged approximately in the center of the other two magnetic poles when the first coil and the second coil are located just opposite to one magnetic pole;

the commutator is attached on the rotor and is divided into six in the rotation direction of the rotor, and at the same time, each of the divided bodies located opposite to each other are commonly connected, and a pair of the divided bodies are connected to each of the other ends of the first through the third coil; and

the brushes are attached on the stator and are connected to the commutator with a spatial phase difference of 90°.

17. The direct current vibration motor according to claim 16, wherein the second coil is coaxially wound around an inside of the first coil.

18. The direct current vibration motor according to claim 16, wherein the first coil and the second coil are simultaneously formed of two-lines coils.

19. The direct current vibration motor according to claim 16, wherein a weight is further provided which is arranged adjacent to the first coil and the second coil in the rotation direction.

20. The direct current vibration motor according to claim 19, wherein the first through the third coil and the weight are integrally fixed with the resin frame.

21. The direct current vibration motor according to claim 16, wherein the first coil and the second coil and the third coil are arranged with a spatial phase difference of approximately 135° in the rotation direction.

22. An armature structure of a direct current vibration motor wherein a rotor is rotatably provided with respect to a stator formed of a permanent magnet magnetized in an axial direction so as to have magnetic poles at a plurality of locations in the circumferential direction, the magnet having a ring-like configuration and being arranged in a ring-like configuration, the armature located

opposite to the magnetic pole of the surface of the permanent magnet of the rotor is eccentrically fixed to the rotation shaft and a current path for supplying to the armature current whose polarity is subsequently reversed along with the rotation of the rotor is formed of current path formation means comprising the commutator and the brush, the structure comprising a first coil and a second coil arranged so that the spatial phase becomes equal to each other;

wherein current is supplied to the first coil and the second coil respectively by making different the electric phase with the current path formation means.

23. The direct current vibration motor according to claim 16, wherein a third coil is further provided adjacent to the first coil and the second coil in the rotation direction;

wherein current is supplied to the first coil through the third coil with the current path formation means by making the electric phase different.